

**This Page Is Inserted by IFW Operations  
and is not a part of the Official Record**

## **BEST AVAILABLE IMAGES**

**Defective images within this document are accurate representations of the original documents submitted by the applicant.**

**Defects in the images may include (but are not limited to):**

- **BLACK BORDERS**
- **TEXT CUT OFF AT TOP, BOTTOM OR SIDES**
- **FADED TEXT**
- **ILLEGIBLE TEXT**
- **SKEWED/SLANTED IMAGES**
- **COLORED PHOTOS**
- **BLACK OR VERY BLACK AND WHITE DARK PHOTOS**
- **GRAY SCALE DOCUMENTS**

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

More particularly, in the § 112, first paragraph, rejection, the Examiner alleges that claim 27 is unclear as to how a transistor without an insulating layer between itself and the semiconductor substrate on which it is formed can function as a transistor (Office Action, p. 3). Additionally, the Examiner alleges that it is not clear what Applicants' mean by the term "connected" and how the device will work if the gates are "connected" by their sidewalls (Office Action, p. 3). In response, Applicants respectfully assert that the claimed invention is sufficiently enabled such that one skilled in the art could make and/or use the invention.

M.P.E.P. § 2164 sets forth the requirements for an enabling specification under § 112, first paragraph, and the guidelines for a proper rejection under this statute. "The purpose of the requirement that the specification describe the invention in such terms that one skilled in the art can make and use the claimed invention is to ensure that the invention is communicated to the interested public in a meaningful way."

M.P.E.P. § 2164 (8<sup>th</sup> Ed. 2001), p. 2100-174. To meet this requirement, "the disclosure of an application must be sufficient to inform those skilled in the relevant art how to both make and use the claimed invention." *Id.*

Furthermore, "any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention."

M.P.E.P. § 2164.01, p. 2100-174. Thus, in order to make an enablement rejection, the Examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention and must provide a reasonable

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

explanation as to why the subject matter claimed is not adequately enabled by the disclosure. See M.P.E.P. § 2164.04, p. 2100-178.

In this case, we submit that claims 27, 28, and 30-33 are sufficiently described in the specification such that one skilled in the art could make and/or use the claimed invention. For example, Figures 10, 13A-D, and 20B (related text on pages 32-38, 45, and 46) illustrates and describes two transistors which are connected by a side wall. Furthermore, the Examiner fails to clearly address why the specification does not enable the claimed invention. In the rejection, the Examiner merely addresses the subject matter recited in the claims, but does not establish a factual basis to support his allegation that the specification lacks an enabling disclosure (or the subject matter). Thus, we submit that the rejection under § 112, first paragraph is improper and, thus, should be withdrawn.

In making the various references to the specification set forth above and hereinafter, it is to be understood that Applicants are in no way intending to limit the scope of the claims to the exemplary embodiments described in the specification. Rather, Applicants expressly affirm that they are entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

In the § 112, second paragraph, rejection, the Examiner alleges that the phrase "a side wall of said first gate electrode at one end of a channel direction is connected to a side wall of said second gate electrode at one end of the channel direction," recited in claim 27 renders that claim indefinite because the term "channel direction" is indefinite since the channel has at least four directions (Office Action, p. 4). Further, the

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

Examiner alleges that “and said side wall of said first gate electrode is connected to the sidewall of said second gate electrode and a side wall of said side insulator film,” recited in claim 33 is unclear (Office Action, p. 4). In response, Applicants respectfully assert that the claimed invention is in compliance with § 112, second paragraph.

M.P.E.P. § 2173 sets forth the requirements for proper claim language under § 112, second paragraph and the guidelines for a proper rejection under this statute. The primary purpose of this requirement of definiteness of claim language is to ensure that the scope of the claims is clear so that the public is informed of the boundaries of what constitutes infringement of the patent and a secondary purpose is to provide a clear measure of what applicants regard as the invention. See M.P.E.P. § 2173, p. 2100-194. When examining a claim with regards to § 112, second paragraph, the Examiner should determine “whether the claim meets the threshold requirements of clarity and precision, not whether more suitable language or modes of expression are available.” M.P.E.P. § 2173.02, p. 2100-194. Moreover, the Examiner should not analyze definiteness of claim language in a vacuum, but in light of, the content of the particular application disclosure, the teachings of the prior art, and the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. *Id.* Breadth of a claim is not to be equated with indefiniteness. M.P.E.P. § 2173.04, p. 2100-195.

Considering the requirements for a rejection under 35 U.S.C. § 112, second paragraph, Applicants submit that the language pointed out by the Examiner is definite. The first phrase “at one end of the channel direction” recited in claim 27 is definite because it sets forth the location of the side wall (i.e. one end of the channel). By

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

alleging the claim is not clear as to which channel direction, the Examiner is suggesting that subject matter arising from the breadth of the claim is indefinite. Additionally, the phrase "at one end of the channel direction," when analyzed in light of the disclosure is clear and definite. For example, the specification at pages 32-38, 45, and 46 discloses an exemplary location of a side wall. Thus, Applicants submit that this rejection under § 112, second paragraph, is improper and should be withdrawn.

Furthermore, Applicants submit that the phrase "said side wall of said first gate electrode is connected to the side wall of said second gate electrode and a side wall of said insulator film" recited in claim 33 is also definite. First, the Examiner does not explain why this phrase is unclear, but merely states the meaning of the phrase "is not understood." This phrase, in light of the content of the particular application disclosure, is definite. For example, the specification at pages 32-38, 45, and 46 discloses an exemplary location of a gate electrode. Thus, Applicants submit that the rejection under § 112, second paragraph is improper and should be withdrawn. <sup>W</sup>

Regarding the § 103(a) rejection, the Examiner contends that claims 27, 28, and 30-33 are obvious over Kume and Tada. Contrary to the Examiner's contention, Applicants respectfully submit that a *prima facie* case of obviousness has not been established for the following reasons.

In order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim elements. Furthermore, "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." See M.P.E.P. § 2143.01, quoting *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. Third, there must be a reasonable expectation of success. See M.P.E.P. § 2143, pp. 2100-122 to 127. In this case, a *prima facie* case of obviousness has not been established because Kume and Tada, taken alone or in combination, fail to teach or suggest, at least that "a side wall of said first gate electrode at one end of a channel direction is connected to a side wall of said second gate electrode at one end of the channel direction," recited in claim 27.

The Examiner alleges that Kume describes all the elements of claims 27, 28, and 30-33 except for a side wall of the first gate electrode at one end of a channel direction being connected to a side wall of the second gate electrode at one end of the channel direction (Office Action, p. 5). The Examiner alleges that Tada, in Figure 3(d) illustrates a direct connection between electrodes at one end of a channel direction (Office Action, p. 5). The Examiner contends that it would have been obvious to one skilled in the art at the time of the invention to include the direct connection between gate electrodes disclosed in Tada in the device described by Kume in order to reduce size (Office Action, p. 6). Applicants, however, submit that the Examiner has misconstrued Tada.

Figure 3d of Tada illustrates an intermediate step in fabricating a semiconductor device, but does not illustrate the final fabricated device. Tada teaches that gate electrodes 13a and 13b are electrically connected. Tada, however, does not disclose that side walls of the gate electrodes are connected. Tada discloses that gate electrodes 13a and 13b are connected through the bottom of the electrodes. See Tada, col. 8, lines 1-11 and Figure 1. Therefore, Tada does not teach or suggest at least that

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

"a side wall of said first gate electrode at one end of a channel direction is connected to a side wall of said second gate electrode at one end of the channel direction," as recited in claim 27.

The Examiner also admits that Kume does not teach this claim element (Office Action, p. 5). Thus, Tada and Kume, taken alone or in combination, fail to teach or suggest all the elements of claim 27. Therefore, a *prima facie* case of obviousness has not been established for claim 27. For at least this reason, claim 27 is allowable.

Claims 28 and 30-33 are allowable at least due to their dependence from allowable claim 27. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." M.P.E.P. § 2143.03, p. 2100-126 citing *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

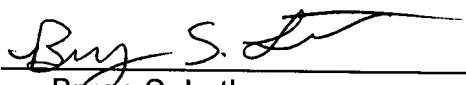
In view of the foregoing, Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: September 4, 2002

By:   
Bryan S. Latham  
Reg. No. 49,085

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com